

**IN THE CLAIMS**

Please amend claims 4 as follows:

**Claims 1-3 (Canceled).**

**Claim 4 (Currently Amended):** A membrane artificial lung for performing gas exchange between blood and a gas via the membrane by flowing blood on a first surface of the membrane and flowing oxygen or an oxygen-containing gas on a second opposing surface of the membrane,

said membrane comprising:

a hollow fiber membrane comprising poly-4-methylpentene-1, and having an oxygen permeation rate  $Q(O_2)$  at 25°C of from  $5 \times 10^{-4}$  to  $2 \times 10^{-3}$   ~~$1 \times 10^{-6}$  to  $3 \times 10^{-3}$~~  (cm<sup>3</sup>(STP)/cm<sup>2</sup>.sec.cmHg) and an ethanol flux of from 0.1 to 100 ml/min.m<sup>2</sup>; and

an ionic complex provided on said first surface of said membrane, said ionic complex comprising:

a first quaternary aliphatic alkylammonium salt having from 22 to 26 carbon atoms in total;

a second quaternary aliphatic alkylammonium salt having from 37 to 40 carbon atoms in total; and

heparin or a heparin derivative.

**Claim 5 (Previously Presented):** The membrane artificial lung according to claim 4, said first quaternary aliphatic alkylammonium salt comprises 5 to 35 wt% of the weight of said first and said second quaternary aliphatic alkylammonium salts, and said second quaternary aliphatic alkylammonium salt comprises from 65 to 95 wt% of said weight of said first and said second quaternary aliphatic alkylammonium salts.

**Claim 6 (Previously Presented):** The membrane artificial lung according to claim 4, said first quaternary aliphatic alkylammonium salt comprises a dimethyldiododecylammonium salt and said second quaternary aliphatic alkylammonium salt comprises a dimethyldioctadecylammonium salt.

**Claim 7 (Previously Presented):** The membrane artificial lung according to claim 5, said first quaternary aliphatic alkylammonium salt comprises a dimethyldiododecylammonium salt and said second quaternary aliphatic alkylammonium salt comprises a dimethyldioctadecylammonium salt.